

WHAT IS CLAIMED IS:

1. A lithographic apparatus comprising:
 - an illumination system configured to provide a beam of radiation;
 - a support structure constructed to support a patterning device, said patterning device configured to impart said beam of radiation with a desired pattern in its cross-section;
 - a substrate holder configured to hold a substrate;
 - a projection system configured to project said patterned beam onto a target portion of said substrate;
 - a conditioned chamber;
 - an actuator configured to introduce at least one of said patterning device and said substrate into said conditioned chamber; and
 - an alignment system configured to position said at least one of said patterning device and said substrate in alignment with said projected patterned beam of radiation, wherein said alignment system is disposed outside said conditioned chamber.
2. The lithographic apparatus of Claim 1, wherein said actuator includes an actuator arm having a carrier structure, said carrier structure configured to move said at least one of said patterning device and said substrate from said alignment system to said support structure or substrate holder, respectively.
3. The lithographic apparatus of Claim 2, wherein said carrier structure is provided with a fixation device configured to fix said at least one of said patterning device and said substrate to said carrier structure.
4. The lithographic apparatus of Claim 2, wherein said alignment system is provided with a docking system configured to dock said carrier structure.

5. The lithographic apparatus of Claim 2, wherein said at least one of said patterning device and said substrate is provided with a docking system configured to dock said carrier structure.

6. The lithographic apparatus of Claim 1, wherein said conditioned chamber comprises a reduced pressure environment.

7. The lithographic apparatus of Claim 1, wherein said conditioned chamber comprises a reduced particle concentration environment.

8. A device manufacturing method comprising:
providing a substrate;
providing a beam of radiation;
providing a patterning device;
introducing at least one of said substrate and said patterning device into a conditioned chamber;
aligning said at least one of said substrate and said patterning device with said beam of radiation outside said conditioned chamber before introducing said at least one of said substrate and said patterning device into said conditioned chamber;
configuring said beam of radiation with a desired pattern in its cross-section based on said patterning device;
projecting said patterned beam of radiation onto a target portion of said substrate.

9. The device manufacturing method of Claim 8, wherein said introducing comprises actuating a carrier structure configured to move said at least one of said patterning device and said substrate from an alignment system to said support structure or said substrate holder contained within said conditioned chamber, respectively.

10. The device manufacturing method of Claim 9, further including securing said at least one of said patterning device and said substrate to said carrier structure.

11. The device manufacturing method of Claim 9, wherein said aligning includes docking said carrier structure with a docking system.

12. The device manufacturing method of Claim 9, further including providing said at least one of said patterning device and said substrate with a docking system configured to dock said carrier structure.

13. The device manufacturing method of Claim 8, wherein said conditioned chamber comprises a reduced pressure environment.

14. The device manufacturing method of Claim 8, wherein said conditioned chamber comprises a reduced particle concentration environment.

15. A lithographic apparatus comprising:
a patterning device configured to impart a beam of radiation with a desired pattern in its cross-section, said patterning device being supported by a support structure;
a projection system configured to project said patterned beam onto a target portion of a substrate, said substrate being held by a substrate holder;
a conditioned chamber housing at least one of said support structure and said substrate holder;
an actuator configured to introduce at least one of said patterning device and said substrate into said conditioned chamber; and
an alignment system, disposed outside said conditioned chamber, to align said at least one of said patterning device and said substrate with said projected patterned beam of radiation.

16. The lithographic apparatus of Claim 15, wherein said actuator includes an actuator arm having a carrier structure, said carrier structure configured to move said at least one of said patterning device and said substrate from said alignment system to said support structure or substrate holder, respectively.

17. The lithographic apparatus of Claim 16, wherein said carrier structure is provided with a fixation device configured to secure said at least one of said patterning device and said substrate to said carrier structure.

18. The lithographic apparatus of Claim 16, wherein said alignment system is provided with a docking system configured to dock said carrier structure.

19. The lithographic apparatus of Claim 16, wherein said at least one of said patterning device and said substrate is provided with a docking system configured to dock said carrier structure.

20. The lithographic apparatus of Claim 15, wherein said conditioned chamber comprises a reduced pressure environment.

21. The lithographic apparatus of Claim 15, wherein said conditioned chamber comprises a reduced particle concentration environment.